

**Subject: Unmanned Aerial Vehicle (UAV) Acquisition**

**Key Issue:** LEI purchased two Unmanned Aerial Vehicle (UAV) on March 2007. Federal Aviation Administration (FAA) issue policy on UAV's on February 6, 2007. LEI received two UAV on December 7, 2007 even though the process was initiated in September 2006. At the time of purchase there were no known regulatory barriers for operation of UAV's. The rules changed in August 1, 2007.

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**Issue Description:**

An Unmanned Aerial Vehicle (UAV) is a remotely controlled aircraft used for surveillance, reconnaissance and monitoring missions. The use of these aircraft will increase Officer safety for use in illegal Drug Trafficking Operations that are occurring on NFS lands. LEI's National Technical Investigations Unit (NTIU) has been monitoring and evaluating UAV's intermittently since 1997, when their use was considered in support of Operation Linebacker, a border enforcement operation.

**Issue Key Points:**

- NTIU worked closely with a USFS Aviation Management Specialist who were reviewing UAV's for wildland fire suppression work, the USAF Research Lab at Eglin Air Force Base and the Special Operations Command (SOCOM).
- Generally two officers are used to operate the UAV, however one can operate the aircraft.
- The operation of a UAV requires a FAA certificated pilot with current class II medical certificated and an observer, who while not required to be a pilot, must have a class II medical certificate.
- LEI personnel have completed the FAA ground school course taught by USFS pilots and is required for flight operation on February 11-15, 2008.
- Other elements of the piloting requirements and Certificate of Authorization (COA) is expected to be completed by the summer of 2008.
- The UAV can rapidly, safely and completely monitor an area for current or past activity of interest.
- UAV monitoring of DTO illegal marijuana sites has a tremendous safety and law enforcement operations planning application.
- The use of these aircraft increases Officer safety as it will provide information regarding the presence of individuals, possible firearms present, and an overview of the topography, vegetation, and other site specific information prior to start of law enforcement operations.
- Illegal marijuana grow sites are often occupied by heavily armed individuals, this has lead to the exchange of gunfire between law enforcement personnel and the occupants of the grow sites during law enforcement operations.
- UAV's are capable of carrying thermal cameras which can transmit their imagery miles back to the operator or ground station which also increases Officer safety.
- UAV's were purchased with FY06 funds.
- Forest Service – LEI took delivery of the UAV's in December of 2007.